



SeaBat 7101

Multibeam Echosounder



SeaBat 7101

- **Phase and amplitude bottom detection**
- **150° swath coverage**
- **240kHz frequency**
- **Up to 600m swath width**
- **Meets IHO Special Order & USACE Class 1 standards**
- **101 / 201 equi-angle or 239 equi-distant beams**
- **Sidescan & snippets output**
- **Gigabit ethernet**
- **Roll stabilized**

Since its release in 1996, the SeaBat 8101 has gained a formidable reputation for performance, reliability and robustness. The new SeaBat 7101 Multibeam Echosounder brings to the forefront the advanced technology utilized across the range of SeaBat 7000 series multibeam systems.

A bathymetric sonar operating at 240kHz, the SeaBat 7101 measures discrete depths over a wide, 150° swath to a maximum range of 500m. A true, time-delay beamformer uses a combination of amplitude and phase detect for maximum performance across the entire swath and roll stabilization maximizes efficiency during survey operations.

Dense sounding coverage is achieved with a combination of 239 equi-distant beams and a range-dependent ping rate of up to 40Hz.

The SeaBat 7101 transducer is available for operating depths of 120,1500 and 3,000 meters. Small and lightweight, it can be mounted on underwater vehicles (ROV or towed) or rapidly deployed onto survey craft of opportunity.

The SeaBat 7101 is available as a complete system or as an upgrade to existing SeaBat 8101 systems.





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SYSTEM PERFORMANCE

Acoustic Frequency:	240kHz, nominal
Horizontal Sector Coverage:	150°
Max Range:	500m (With extended range option)
Number of Beams:	101 or 201 equi-angle or 239 equi-distant
Receiver Beamwidth:	Cross-track: 1.8° (± 0.2°) at center Along track: 20° (± 3°)
Projector Beamwidth:	Cross-track: 162° (± 5°) (Standard), 150° (± 8°) (ER) Along track: 1.7° (± 0.2°)
Max. Update Rate:	40Hz (range selection dependent)
Depth Resolution:	12.5 mm

PROCESSOR SPECIFICATIONS

Temperature:	Operating: 0° to +40°C	Storage: -30° to +55°C
Data Uplink:	High-speed digital coax with fiber-optic option	
Computer Interface:	Gigabit Ethernet	
Display Video Out:	SVGA: 1024 x 768 or higher	
Input Device:	Keyboard / mouse	
	Height: 220.8 mm	
	Width: 482.2 mm (with mounting ears)	
Dimensions (HWD):	Depth: 629.9 mm (with handles)	
Mounting:	19in. rack mountable	
Weight:	30 kg	

SONARHEAD SPECIFICATIONS

Power Requirements:	24VDC, 2 amps max. (Power available from Processor.)	
Operating Depth:	100m (120,1500, and 3000m available)	
Dimensions:	266 x 320mm (W / D) excluding projector	
Temperature:	Operating: -2° to 35°C Storage: -30° to 70°C	
Weight (aluminum 120m):	Dry: 26.8kg (59lbs.)	Wet: 4.8 kg
Weight (titanium 1500m):	Dry: 40kg (88lbs.)	Wet: 18.0 kg

OPTIONS

19" Marine Grade Monitor
1 TB External RAID Drive
Fiber optic conversion for ROV installations
7101 Mounting Plate Assembly & Fairings
SVP-70 Sound Velocity Profiler with 25m Cable
Service & Maintenance
7101 Spares kit

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Unless otherwise specified, beams are measured unsteered, at centre frequency and at a sound velocity of 1480m/sec



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